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Application Number 09/975,308

Filing Date October 11, 2001

First Named Inventor Friddle

Group Art Unit 1643- I64 6

Examiner Name Not Yet Assigned WAY & Ruix lang Li

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 1 of 3 Attorney Docket Number LEX-0252-USA

		U.S. PATENT DOCUMENTS  U.S. Patent Document  Date of Publication  Pages, Columns, Line						
xaminer	Cite No.¹	Number Kind Code <sup>2</sup> ( <i>if known</i> )	Name of Patentee or Applicant of Cited Document	Date of Publication of cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear			
RL.	X	4,190,496	Rubenstein et al	02/26/80				
0002	8	4,215,051	Schroeder et al	07/29/80				
4 7682	<b>X</b>	4,376,110	David et al	03/08/83	<u></u>			
	\$	4,594,595	Struckman	06/10/86	우 고			
, cut	<b>5</b> ∕€	4,631,211	Houghten	12/23/86				
4DE UNC	AF	4,683,195	Mullis et al	07/28/87	2 6			
	AG	4,683,202	Mullis	07/28/87				
	AH	4,689,405	Frank et al	08/25/87	<b>30</b> C			
	Al	4,713,326	Dattagupta et al	12/15/87	21			
	A.J	4,800,159	Mullis et al	01/24/89	2007			
	AK	4,873,191	Wagner et al	10/10/89	<del>28 2 11</del>			
	AL	4,946,778	Ladner et al	08/07/90	<u> </u>			
	AM	5,075,217	Weber	12/24/91				
	AN	5,252,743	Barrett et al	10/12/93				
	AO	5,272,057	Smulson et al	12/21/93				
	AP	5,283,713	Nagafuji et al	02/01/94				
	AQ	5,364,759	Caskey et al.	11/15/94				
	AR	5,424,186	Fodor et al	06/13/95				
	AS	5,445,934	Fodor et al	08/29/95				
	AT	5,459,127	Felgner et al	10/17/95				
	AU	5,468,614	Fields et al	11/21/95	***			
	AV	5,491,084	Chalfie et al	02/13/96				
	AW	5,556,752	Lockhart et al	09/17/96				
	AX	5,625,048	Tsien et al	04/29/97				
	AY	5,667,973	Fields et al	09/16/97				
_	AZ	5,700,637	Southern	12/23/97				
_	BA	5,723,323	Kauffman et al	03/03/98				
	ВВ	5,744,305	Fodor et al	04/28/98	· · · · · · · · · · · · · · · · · · ·			
	ВС	5,777,079	Tsien et al	07/07/98				
	BD	5,795,737	Seed et al	08/18/98				
	BE	5,804,387	Cormack et al	09/08/98				
	BF	5,837,458	Minshull et al	11/17/98				
	BG	5,874,304	Zolotukhin et al	02/23/99				
	BH	5,877,397	Lonberg et al	03/02/99				
	BI	5,948,767	Scheule et al	09/07/99				
-	BJ	5,968,750	Zolotukhin et al	10/19/99				
	BK	5,976,796	Szalay et al	11/02/99				
	BL	6,020,192	Muzyczka et al	02/01/00				
$\rightarrow$	ВМ	6,027,881	Pavlakis et al	02/22/00				
-	BN	6,054,321	Tsien et al	04/25/00	· · · ·			
$\rightarrow$	BO	6,075,181	Kucherlapati et al	06/13/00				
-	BP	6,096,865	Michaels	08/01/00				
-	BQ BR	6,110,490 6,146,826	Thierry Chalfie et al	08/29/00 11/14/00				
-		<del> </del>		<del></del>				
	BS	6,150,584	Kucherlapati et al	11/21/00				
	BT	6,172,188	Thastrup et al	01/09/01				

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INIE	ORMATION E	NIC!	O OCUDE	Application Number	09/975,308 October 11, 2001		
				Filing Date			
SIA	TEMENT BY	A	PLICANI	First Named Inventor	Friddle		
				Group Art Unit	<del>-1643</del>	1646	
	(use as many sheets	as nec	essary)	Examiner Name	-Not-Yet-Assigned-	Ruixiang Li	
Sheet	2	of	3	Attorney Docket Number	LEX-0252-USA	. 🔾	

			OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS
	iminer als*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
17	类	BV	Askew et al, 1989, "Molecular Recognition with Convergent Functional Groups, 6. Synthetic and Structural Studies with a Model Receptor for Nucleic Acid Components", J. Am. Chem. Soc. 111:1082-1090.
		ZW.	Bird et al, 1988, "Single-Chain Antigen-Binding Proteins", Science 242:423-426.
3 1 4	2002	<b>8</b> 8X	Bitter et al, 1987, "Expression and Secretion Vectors for Yeast", Methods in Enzymology 153:516-544.
Zeana	ARK	ST S	Butler, 1981, "The Amplified ELISA: Principles of and Applications for the Comparative Quantitation of Class and Subclass Antibodies and the Distribution of Antibodies and Antigens in Biochemical Separates", Methods in Enzymology 73:482-523.
		BZ	Chien et al, 1991, "The two-hybrid system: A method to identify and clone genes for proteins that interest with a protein of interest", Proc. Natl. Acad. Sci. USA 88:9578-9582.
		CA	Colbere-Garapin et al, 1981, "A New Dominant Hybrid Selective Marker for Higher Eukaryotic Cells" Mol. Biol. 1
		СВ	Gautier et al, 1987, "α-DNA IV:α-anomeric and β-anomeric tetrathymidylates covalently linked to intercalating oxazolopyridocarbazole. Synthesis, physiochemical properties and poly (rA) binding", Nucleic Acids Research 15(16):6625-6641.
		CC	Gordon, 1989, "Transgenic Animals", International Review of Cytology, 115:171-229.
		CD	Greenspan et al, 1993, "Idiotypes: structure and immunogenicity", FASEB Journal 7:437-444.
		CE	Gu et al, 1994, "Deletion of a DNA Polymerase β Gene Segment in T Cells Using Cell Type-Specific Gene Targeting", Science 265:103-106.
		CF	Houghten et al, 1991, "Generation and use of synthetic peptide combinatorial libraries for basic research and drug discovery", Nature 354:84-86.
			Huse et al, 1989, "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda", Science 246:1275-1281.
		СН	Huston et al, 1988, "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxin single-chain Fv analogue produced in Escherichia coli", Proc. Natl. Acad. Sci. USA 85:5879-5883.
		CI	Inoue et al, 1987, "Sequence-dependent hydrolysis of RNA using modified oligonucleotide splints and R Nase H", FEBS Letters 215(2):327-330.
L		CJ	Inoue et al, 1987, "Synthesis and hybridization studies on two complementary nona(2'-O-methyl)ribonucleotides", Nucle Acids Research 15(15):6131-6149.
L		СК	Inouye & Inouye, 1985, "Up-promoter mutations in the lpp gene of Escherichia coli", Nucleic Acids Research 13(9):3101.
L		CL.	Janknecht et al, 1991, "Rapid and efficient purification of native histidine-tagged protein expressed by recombinant vaccinia virus", PNAS 88:8972-8976.
			Kohler & Milstein, 1975, "Continuous cultures of fused cells secreting antibody of predefined specificity", Nature 256:495-497.
		CN	Lakso et al, 1992, "Targeted oncogene activation by site-specific recombination in transgenic mice", Proc. Natl. Acad. Sci. USA 89:6232-6236.
$\vdash$		co	Lam et al, 1991, "A new type of synthetic peptide library for identifying ligand-binding activity", Nature 354:82-84.
		СР	Lavitrano et al, 1989, "Sperm Cells as Vectors for Introducing Foreign DNA into Eggs: Genetic Transformation of Mice" Cell 57:717-723.
	$\perp$		Lewis et al, 1989, "Automated site-directed drug design: the formation of molecular templates in primary structure generation", Proc. R. Soc. Lond. B 236:141-162.
			Lo, 1983, "Transformation by Iontophoretic Microinjection of DNA: Multiple Integrations without Tandem Insertions", Mo Cell. Biology 3(10):1803-1814.
		ļ	Logan et al, 1984, "Adenovirus tripartite leader sequence enhances translation of mRNAs late after infection", Proc. Na. Acad. Sci. USA 81:3655-3659.
<u>_</u>	_	СТ	Lowy et al, 1980, "Isolation of Transforming DNA: Cloning the Hamster aprt Gene", Cell 22:817-823.
L		CU	Luo et al, 1997, "Mammalian two-hybrid system: a complementary approach to the yeast two-hybrid system", Biotechniques 22(2):350-352.
	V	CV	McKinlay et al, 1989, "Rational Design of Antiviral Agents", Annu. Rev. Pharmacol. Toxicol. 29:111-122.

Patent and ersons are required to respond to a collection of information un

proved for use through 10/31/99. OMB 0651-0031 mark Office; U.S. DEPARTMENT OF COMMERCE displays a valid OMB control number.

Substitute for form 1449B/PTO Complete if Known 09/975,308 Application Number INFORMATION DISCLOSURE Filing Date October 11, 2001 STATEMENT BY APPLICANT Friddle **First Named Inventor** Group Art Unit (use as many sheets as necessary) Not Yet Assigned Ruixiang Examiner Name Sheet 3 of Attorney Docket Number LEX-0252-USA

			OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
	aminer tials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
P	Z.	CW	yajima et al, 1986, "Expression of murine and human granulocyte-macrophage colony-stimulating factors in S. revisiae: mutagenesis of the potential glycosylation sites", The EMBO Journal 5(6):1193-1197.				
	2002	СХ	Morrison et al, 1984, "Chimeric human antibody molecules: Mouse antigen-binding domains with human constant regoldomains", Proc. Natl. Acad. Sci. USA 81:6851-6855.				
		<b>1</b>	Mulligan & Berg, 1981, "Selection for animal cells that express the Escherichia coli gene coding for xadihne-granine phosphoribosyltransferase", Proc. Natl. Acad. Sci. USA 78(4):2072-2076.				
	JA PH	cz	Neuberger et al, 1984, "Recombinant antibodies possessing novel effector functions", Nature 312:604				
W.		DA	Nisonoff, 1991, "Idiotypes: Concepts and Applications", J. of Immunology 147:2429-2438.	-			
		DB	O'Hare et al, 1981, "Transformation of mouse fibroblasts to methotrexate resistance by a recombinant painid expressing a prokaryotic dihydrofolate reductase", Proc. Natl. Acad. Sci. USA 78(3):1527-1531.	B.			
		DC	Platt, K.A. et al, 1994, "Independent Regulation of Adipose Tissue-specificity and Obesity Response of the Adipsin Promoter in Transgenic Mice", The Journal of Biological Chemistry 269(46):28558-28562.	2.			
		DD	Ripka, 1988, "Computers picture the perfect drug", New Scientist 16:54-57.				
		DE <sub>.</sub>	Santerre et al, 1984, "Expression of prokaryotic genes for hygromycin B and G418 resistance as dominant-selection markers in mouse L cells", Gene 30:147-156.				
		DF	Sarin et al, 1988, "Inhibition of acquired immunodeficiency syndrome virus by oligodeoxynucleoside methylphosphonates", Proc. Natl. Acad. Sci. USA 85:7448-7451.				
		DG	Sarver et al, 1990, "Ribozymes as Potential Anti-HIV-1 Therapeutic Agents", Science 247:1222-1225.				
		DH	Smith et al, 1983, "Molecular Engineering of the Autographa californica Nuclear Polyhedrosis Virus Genome: Deletion Mutations within the Polyhedrin Gene", J. Virol. 46(2):584-593.				
		DI.	Songyang et al, 1993, "SH2 Domains Recognize Specific Phosphopeptide Sequences", Cell 72:767-778.				
		DJ	Stein et al, 1988, "Physiochemical properties of phosphorothioate oligodeoxynucleotides", Nucleic Acids Research 16(8):3209-3221.				
		DK	Szybalska & Szybalski, 1962, "Genetics of Human Cell Lines, IV. DNA-Mediated Heritable Transformation of a Biochemical Trait", Proc. Natl. Acad. Sci. USA 48:2026-2034.				
		DL	Takeda et al, 1985, "Construction of chimaeric processed immunoglobulin genes containing mouse variable and human constant region sequences", Nature 314:452-454.				
		DM	Thompson et al, 1989, "Germ Line Transmission and Expression of a Corrected HPRT Gene Produced by Gene Targeting in Embryonic Stem Cells", Cell 56:313-321.	g			
		DN	Van Der Putten et al, 1985, "Efficient insertion of genes into the mouse germ line via retroviral vectors", Proc. Natl. Acad. Sci. USA 82:6148-6152.				
		DO	Van Heeke et al, 1989, "Expression of Human Asparagine Synthetase in Escherichia coli", J. Biol. Chemistry 264(10):5503-5509.				
		DΡ	Voller et al, 1978, "Enzyme immunoassays with special reference to ELISA techniques", J. Clinical Pathology 31:507-5				
		DQ	Ward et al, 1989, "Binding activities of a repertoire of single immunoglobulin variable domains secreted from Escherichia coli", Nature 341:544-546.	_			
		DR	Wigler et al, 1977, "Transfer of Purified Herpes Virus Thymidine Kinase Gene to Cultured Mouse Cells", Cell 11:223-232.	_			
	V	DS	Wigler et al, 1980, "Transformation of mammalian cells with an amplifiable dominant-acting gene", Proc. Natl. Acad. Sci. USA 77(6):3567-3570.				
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	aminer Instille		Pursuang L. Date Considered (130/2707-				

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